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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,484	08/27/2001	Per Hans Ake Willars	2380-488	3574

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EXAMINER

MEW, KEVIN D

ART UNIT	PAPER NUMBER
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2664

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/938,484	Applicant(s) WILLARS ET AL.	
	Examiner Kevin Mew	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 16, 17, 19, 21 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 2, 3, 5, respectively, of prior U.S. Patent No. 6,285,667. This is a double patenting rejection.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 26-27 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13-14, respectively of U.S. Patent No. 6,285,667.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 13 and 14 of the instant application merely broadens the scope of the claim 1 of the Patent by eliminating the elements (i.e. “generic” and “containing a page channel in communication with said first and second core networks”) and their functions of the claims. It has been held that the omission an element and its function is an obvious expedient if the remaining elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd.App.1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 16-18, 20-23, 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Vialen et al. (US Publication 2002/0019241).

Regarding claim 16, Vialen discloses a method of connecting calls through a radio access network (UTRAN, see Fig. 1) to a mobile radio (MS 1, see Fig. 1) in communication with a first core network (SGSN 6, see Fig. 1) on a first call (signaling connection, see entire paragraph 0041), comprising the steps of:

receiving the first call from a first core network connection (receiving signaling connection from SGSN 6, see entire paragraph 0041 and Fig. 1);

delivering the first call to the mobile radio on a radio call channel (delivering signaling connection to MS 1, see entire paragraph 0041);

receiving a page request for the mobile radio from a second core network (RNC3 receives a paging request from MSC 5, see entire paragraph 0041);

delivering the page request to the mobile radio while continuing to maintain the first call on the radio call channel (RNC3 transmits a multicall paging message 102 to the MS 1, see entire paragraphs 0041, 0042);

receiving a page response from the mobile radio on the radio call channel (RNC3 receives a paging response 103 from MS 1, see paragraphs 0041, 0042, 0043);

establishing a second core network connection to the second core network (a signaling connection is established between MS 1 and CN 2, see entire paragraph 0046 and Fig. 3; note that MSC 5 or CN2 is second core network); and

delivering the page response to the second core network on the second core network connection (MS 1 transmits a multicall paging response 107 to RNC 3, see entire paragraph 0047 and Fig. 3).

Regarding claim 17, Vialen discloses a method according to claim 16, further including the steps of:

receiving a second call from the second core network (RNC 3 in the UTRAN receives a paging request 101 from CN2 or MSC 5, see entire paragraph 0041 and Fig. 2),

multiplexing the first call from the first core network with the second call from the second core network (RNC 3 transmits a multicall message to the MS 1, see entire paragraph 0041 and Fig. 2),

delivering the multiplexed first and second calls to the mobile radio on the radio call channel (RNC 3 transmits a multicall message to the MS 1 by using the existing RRC connection, see entire paragraph 0041 and Fig. 2).

Regarding claim 18, Vialen discloses a method according to claim 17, wherein after the step of delivering the multiplexed first and second calls, the method further includes the steps of:

reviewing information pertaining to the first and second calls from the mobile radio over the radio call channel (RNC 3 determines the information contained in the multicall paging message, see entire paragraph 0051), and directing the information pertaining to the first call to the first core network and the information pertaining to the second call to the second core network (RNC 3 in UTRAN determines the service state of the paged MS 1 in order to determine the channel on which the multicall paging message will be transmitted, see entire paragraph 0051 and Figs. 1, 2, 3).

Regarding claim 20, Vialen discloses a method according to claim 16, wherein the first and second core networks are different (CN 1 is SGSN 6 and CN 2 is MSC 5, see entire paragraphs 0041, 0042 and Fig. 2).

Regarding claim 21, Vialen discloses a method according to claim 16, wherein the page response is delivered on a signaling portion of the radio call channel (page response is transmitted on existing signaling connection, see entire paragraph 0041 and Fig. 2).

Regarding claim 22, Vialen discloses a radio access network (see Fig. 1), comprising:

- a plurality of network links (see links from RNC to MSC and SGSN) to be used to establish call communications with a plurality of core networks (SGSN 6, MSC 5, see Fig. 1),
- a plurality of radio links to be used to establish call communications (radio links from MS 1 to multiple BS 2, see Fig. 2) with one or more mobile stations (see MS 1, Fig. 1),
- a radio access network (RAN) node (RNC 3, see Fig. 1) configured to (1) establish a first call connection between a first core network (SGSN 6, see Fig. 1) and a mobile station (MS 1, see Fig. 1) using a first network link (first network link between RNC 3 and SGSN 6, see Fig. 1) and a first radio link (radio link between MS 1 and BS 2, see Fig. 2), (2) receive a page for the mobile station (RNC 3 receives a multicall paging response from MS 1, see entire paragraph 0041), and (3) establish a second call connection to the mobile station using a second network link (establishing communication between MS 1 and MSC 5, see entire paragraph 0042) and the first radio link (a signaling connection between MS 1 and SGSN 6, see entire paragraph 0041),
- a multiplexer (RNC 3, see Fig. 1) for combining call communications from the first and second core networks (SGSN 6 and MSC 5, see Fig. 1) for the mobile station onto the first radio link for communication to the mobile station (radio link from UTRAN to MS 1, see Fig. 1) and providing the combined call communications for delivery to the mobile station on the first radio link (see entire paragraphs 0041, 0042, 0043 and Fig. 1).

Regarding claim 23, Vialen discloses a radio access network according to claim 22, wherein the multiplexer (RNC 3) is initiated by a page response on the first radio link from the single mobile station (RNC 3 receives a multicall paging response from MS 1, see entire paragraph 0041 and Fig. 2).

Regarding claim 25, Vialen discloses a radio access network according to claim 22, wherein:

the multiplexer (RNC 3) is configured to route corresponding communications from the mobile station (MS 1) received on the first radio link (first radio link between MS 1 and UTRAN) to the first and second core networks (see entire paragraphs 0041-0048 and Figs. 1, 2, 3; note that SGSN 6 is CN1 and MSC 5 is CN2).

Regarding claim 26, Vialen discloses a system (see Fig. 1) for connecting a second call to a mobile radio engaged in a first call (see entire paragraphs 0041, 0042, 0043), comprising:

a first core network (SGSN 6, see Fig. 1),

a second core network (MSC 5, see Fig. 1),

a radio access network (UTRAN, see Fig. 1) in communication with the first core network via a first core network channel (RNC 3 in UTRAN communicates with SGSN 6 via a network link, see Fig. 1) and with the second core network via a second core network channel (RNC 3 in UTRAN communicates with MSC 5 via another network link, see Fig. 1) and, a plurality of mobile terminals in communication with the radio access network (MS 1 in

communication with UTRAN, see Fig. 1), one of the mobile terminals (MS 1, see Fig. 1) being configured to engage in the first call with the first core network (SGSN 6, see Fig. 1) via a mobile terminal call channel and the first core network channel (MS 1 is engaged in a signaling connection with SGSN 6, see entire paragraph 0041 and Fig. 1), wherein the radio access network (UTRAN) includes a multiplexer (RNC 3, see Fig. 1) for receiving via the mobile terminal call channel a page response signal from the first mobile terminal (RNC 3 receives a multicall paging response from MS 1, see entire paragraph 0041), routing the page response signal to the second core network via the second core network channel (RNC 3 transmits a corresponding paging response 104 to MSC 5, see entire paragraph 0042), and routing the first call from the mobile terminal call channel to the first core network via the first core network channel (RNC 3 establishes connection between MS 1 and SGSN 6, see entire paragraph 0041, Figs. 1 and 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19, 24, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vialen et al. in view of Ho et al. (USP 6,091,953).

Regarding claim 19, Vialen discloses all the aspects of the claimed invention set forth in the rejection of claim 16 above, except fails to explicitly show a method according to claim 16,

wherein the first and second core networks are the same core network. However, Ho discloses a wireless communication system in which multiple core networks of the same MSC type are deployed (see col. 1, lines 43-67 and col. 2, lines 1-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the paging system and method with the teaching of Ho such that the first and second core networks are of the same MSC type. The motivation to do so is to provide more than one core network of the same type to increase the system capacity accordingly in order to support a higher number of subscribers.

Regarding claim 24, Vialen discloses a plurality of network links (links between RNC 3 and SGSN 6 and MSC 5, see Fig. 1) and the plurality of mobile station links (radio link between MS 1 and BS 2, see Fig. 1) include signal channels (see entire paragraphs 0041, 0042, 0043 and Fig. 2).

Vialen does not explicitly show the mobile radio links include traffic channels and the multiplexer is configured to combine traffic channels from the first and second core networks and to combine signal channels from the first and second core networks.

However, Ho discloses a wireless communication system in which a multifunction network is used to perform both traffic and signaling functions from multiple core networks MSCs 104-108 (see col. 7, lines 39-54 and col. 8, lines 6-10, and Figs. 2 and 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the paging system and method of Vialen with the teaching of Ho such that the radio access network will combine traffic channels and signaling channels from both the SGSN core network and the MSC core network. The motivation to do so is provide a centralized location to

route all calls within the system such that the loading on the core networks due to subscriber mobility is substantially reduced.

Regarding claim 27, Vialen discloses a system according to claim 26, wherein the first call is communicated between the radio access network (UTRAN) and the first mobile terminal (MS 1) via control channels of the mobile terminal call channel (see entire paragraphs 0041, 0042, 0043 and Figs. 1 and 2).

Vialen does not explicitly show after the page response, the multiplexer is configured to consolidate traffic and control information for the first and second calls to the one mobile terminal via the first traffic and control channels.

However, Ho discloses a wireless communication system in which a multifunction network is used to perform both traffic and signaling functions from multiple core networks MSCs 104-108 (see col. 7, lines 39-54 and col. 8, lines 6-10, and Figs. 2 and 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the paging system and method of Vialen with the teaching of Ho such that RNC 3 of Vialen will consolidate traffic channels and signaling channels from both the SGSN core network and the MSC core network to the first traffic and control channels of the mobile station. The motivation to do so is provide a centralized location to route all calls via an existing RRC connection to a mobile station such that the loading on the core networks due to subscriber mobility is substantially reduced.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure with respect to page response on existing radio signaling channel.

US Patent 6,463,055 to Lupien et al.

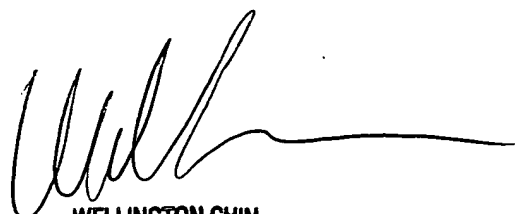
US Patent 6,505,044 to Back et al.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 571-272-3141. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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